

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

**MORPHOMETRIC:**

Lake: MOUNTAINVIEW LAKE	Lake Area (ha): 42.41
Town: SUNAPEE	Maximum depth (m): 6.7
County: Sullivan	Mean depth (m): 4.1
River Basin: Connecticut	Volume (m <sup>3</sup> ): 1758000
Latitude: 43°20'46" N	Relative depth: 0.9
Longitude: 72°04'46" W	Shore configuration: 1.60
Elevation (ft): 1116	Areal water load (m/yr): 4.18
Shore length (m): 3700	Flushing rate (yr <sup>-1</sup> ): 1.00
Watershed area (ha): 336.7	P retention coeff.: 0.69
% watershed ponded: 1.0	Lake type: natural w/dam

**BIOLOGICAL:**

		10 March 1993	6 July 1992
DOM. PHYTOPLANKTON (% TOTAL)	#1	ASTERIONELLA 80%	DINOBRYON 60%
	#2	DINOBRYON 15%	ASTERIONELLA 25%
	#3		MELOSIRA 5%
PHYTOPLANKTON ABUNDANCE (cells/mL)			940
CHLOROPHYLL-A (µg/L)			3.11
DOM. ZOOPLANKTON (% TOTAL)	#1	KELICOTTIA 33%	NAUPLIUS LARVA 25%
	#2	NAUPLIUS LARVA 25%	ROTIFER SPP. 18%
	#3	KERATELLA 19%	KERATELLA 16%
ROTIFERS/LITER		68	106
MICROCRUSTACEA/LITER		54	63
ZOOPLANKTON ABUNDANCE (#/L)		126	182
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			3.5
BOTTOM DISSOLVED OXYGEN (mg/L)		7.1	0.5
BACTERIA (E. coli, #/100 ml)	#1		20
	#2		< 10
	#3		

**SUMMER THERMAL STRATIFICATION:**

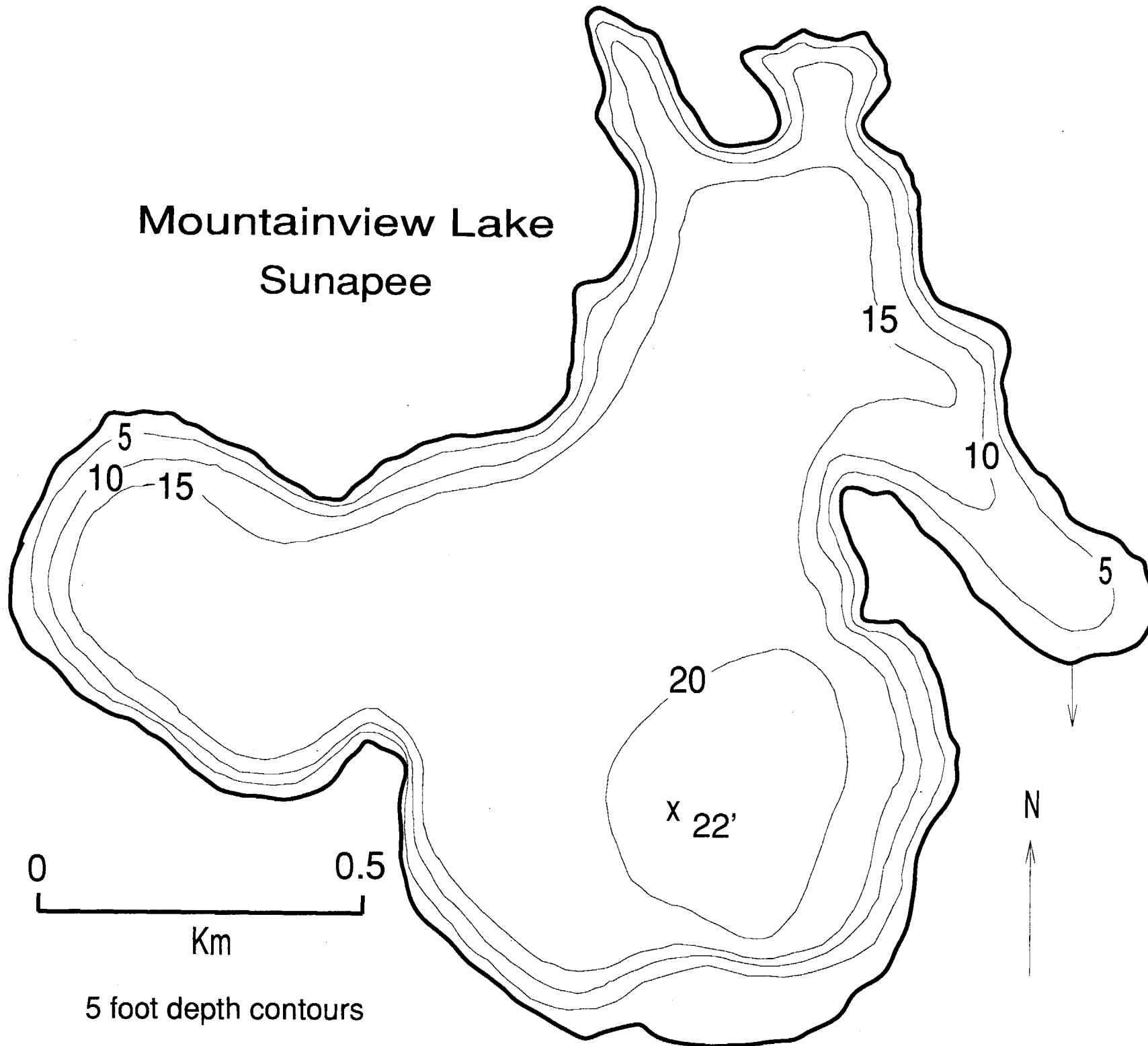
stratified

Depth of thermocline (m): 4.7  
Hypolimnion volume (m<sup>3</sup>): None  
Anoxic volume (m<sup>3</sup>): 75500

CHEMICAL:		Lake: MOUNTAINVIEW LAKE Town: SUNAPEE				
	10 March 1993		6 July 1992			
DEPTH (m)	1.5	3.5	1.5	3.5	5.5	
pH (units)	6.7	6.4	6.7	6.4	6.3	
A.N.C. (Alkalinity)	6.2	7.3	6.2	5.1	7.5	
NITRATE NITROGEN	0.02	0.04	< 0.02	< 0.02	< 0.02	
TOTAL KJELDAHL NITROGEN						
TOTAL PHOSPHORUS	0.010	0.013	0.008	0.007	0.018	
CONDUCTIVITY (µmhos/cm)	119.2	118.4	104.2	104.1	105.4	
APPARENT COLOR (cpu)	47	50	16	19	32	
MAGNESIUM			0.75			
CALCIUM			3.6			
SODIUM			13.5			
POTASSIUM			0.83			
CHLORIDE	26	27	23	23	22	
SULFATE	6	6	5	5	5	
TN : TP						
CALCITE SATURATION INDEX			3.3			
All results in mg/L unless indicated otherwise						
<b>TROPHIC CLASSIFICATION: 1992</b>						
	D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
	**	2	1	0	3	Oligo.
<b>COMMENTS:</b>						
1. Also known as Spectacle Pond. 2. No boat launch site. 3. There was a high density of cottages around most of the shoreline. 4. The pond has a concrete dam. 5. This pond was previously surveyed and classified in 1978. There was no change in the trophic classification between the two years. 6. The dominant genera of wholewater phytoplankton were <u>Aphanocapsa</u> (20%) and <u>Melosira</u> (15%). Diatoms (35%) and blue-greens (30%) were the dominant classes.						

# Mountainview Lake Sunapee

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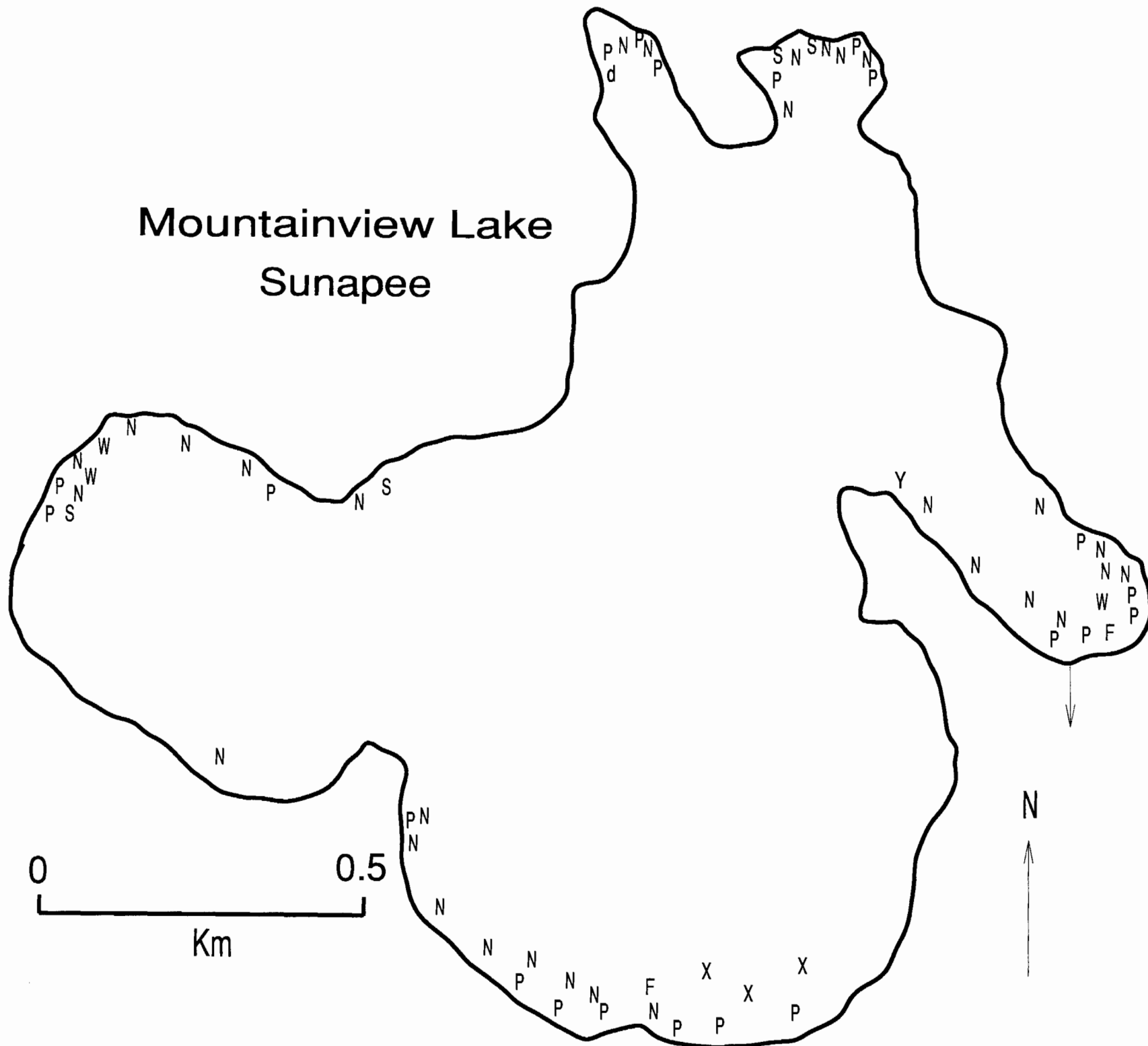


5 foot depth contours

[illegible]

# Mountainview Lake

## Sunapee



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